



SIR JONATHAN HUTCHINSON

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SIR JONATHAN HUTCHINSON, 1828-1913*

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It is just 50 years since Sir Jonathan Hutchinson died at his home in Haslemere, Surrey, and it was thought appropriate to publish a short biography to commemorate the life and work of one of the greatest and most beloved figures of Victorian medicine.

The most definite statement about, although not by any means the earliest clue to, the origin of this Hutchinson family, is to be found in the first paragraph of the autobiography of Jonathan Hutchinson (1760–1835), the “Good man of Gedney”, to whose nobility of character and saintly disposition, his grandson paid great tribute in later years. Jonathan Hutchinson of Gedney writes:

“I was born in Gedney in the County of Lincoln on the 7th of the 2nd month 1760 where as I have been informed my ancestors had resided for many generations in the outward occupation of farmers, the only business I ever followed. It also appears that part of the family from which I descended joined the religious Society of Friends soon after its rise.”

On the death of his father in 1794, this Jonathan Hutchinson inherited the family lands in Gedney and soon afterwards became not only a prosperous sheep farmer but also, until his death, a much-beloved Quaker Minister, for whom neither bad weather nor personal inconvenience was ever an excuse for not attending the monthly, quarterly, and annual meetings of the Society of Friends. His attachment to Quaker principles and practices increased throughout his life and, as the beauty of his character developed, so he grew in the respect and love of his family and friends.

In 1792, during a visit to Selby in Yorkshire, he met and married Rachel Proctor, the daughter of a Quaker friend who was employed as a middleman in the flax business of which Selby at that time was a flourishing centre. Jonathan and Rachel Hutchinson returned to live in Gedney and brought up a family

of six children. Rachel Hutchinson died in 1808 and the second son, Jonathan, was sent to Selby soon after her death to live with her relations, the Proctors, and to become an apprentice in the flax business, which was now in the hands of William and Thomas Proctor, his uncles, and William Massey, a very near relation. All these were prominent members of the Society of Friends in Selby. So well did this Jonathan Hutchinson succeed that in a little time he became the head of the flourishing business, and in 1825 he married Elizabeth Massey, the sister of William Massey, his business partner. These were the parents of Jonathan Hutchinson, the “J.H.” of this biographical sketch.

The birth of J.H. into a well-to-do middle class home situated in a small country town, of parents steeped in the profound convictions of the Society of Friends and themselves heirs to two long lines of deeply religious Quaker families, played a great part in determining those traits of character, that unshakable sense of reverence for, and devotion to, truth, that personality which made him so revered a figure in Victorian medicine. Being brought up, too, in a closely knit family atmosphere with eleven other brothers and sisters, and sharing in the family life of nine cousins, the children of his father's brother, John, who lived near Selby, meant a childhood of rich companionship and affection. In addition to this, his father was a zealous champion of every kind of Reform movement, being an especially active life-long leader of the Temperance Movement in the town, and this particularly developed in each member of his family, and especially in his second son, a sense of responsibility for awakening the consciences of their fellow men to the necessity of every kind of social reform.

Jonathan Hutchinson, “J.H.”, was born in the Quay House in Selby on July 23, 1828, the second child and second son in a family of twelve children. Because of his father's unhappy experience in a

* Invited article to mark the fiftieth anniversary of Hutchinson's death on June 23, 1913.

boarding school, all the members of the family were educated first at home by the Misses Proctor, who were distant relatives and acted as governesses, and later at the day school of Mr. George Beilby. In the diary which J.H. kept for many years, he speaks of the happy security of his childhood in Selby, living the first 17 years of his life as the son of a prosperous business man in the society of a small country town, a life based completely on the strict membership and narrow religious beliefs of the Society of Friends, where the cut of the clothes and the width of the hat brim were extremely important outward signs of religious conformity, but yet enjoying to the full all the amusements to be found in a large family, being excited by Temperance rallies and meetings, feast days and country festivals, annual seaside holidays and country excursions and pursuits, and above all, visiting and being visited by relations and Quaker Ministers and friends, until eventually he rose to take his own place as a speaker on the Temperance platform and to become a teacher in the Quaker Sunday School.

His diary reveals that when he was about 16 years old, J.H. passed through a period of introspection almost morbid in its intensity. During this period of adolescence he longed to fulfil his desire for personal goodness by dedicating his life to bettering the lot of those less fortunate than himself, and the result was that he decided to offer himself as a missionary. It was the fervency of this determination which persuaded his father to consent to his breaking with family tradition and to allow him to study medicine, accepting the argument that a knowledge of medicine would be a very sensible asset to missionary work. Whilst J.H. never became a missionary in the accepted sense, yet the spirit of the missionary never left him. Indeed, it is true to say and easy to see that he was driven, throughout his life, by this early desire to minister to men's needs, to become a devoted educator and teacher. Incidentally, his eldest brother Massey, also broke away from tradition and became a dentist.

When young J.H. left Selby in 1845 to become an apprentice to the profession of medicine, there is much to admire in his character and some things to dislike. He was deeply religious but narrowly bigoted because of the strictness of his religious upbringing, yet through that upbringing he was steeped in family pride and conscious of his place in society, as a member of a family all of whom were leaders of social reform in a small country society. Outwardly priggish, he was inwardly longing for spiritual satisfaction and hoped to achieve it by dedicating his talents to satisfying the needs of others. Certainly he was an idealist, and all in all a young Quaker from Quaker

stock proud to show his inner convictions by his outward dress and manners, proud to subscribe to the forms and ceremonies of his kind.

J.H. was apprenticed to Caleb Williams, Apothecary and Surgeon, of York, on January 22, 1845, for a period of 5 years, and during the last 2 years of his apprenticeship, he was expected to attend lectures at the York Medical School and the wards of the York County Hospital. When he talked in later years of his apprenticeship, he told how he slept under the counter in true apprenticeship style and spent long hours making pills and plasters and rolling bandages for his master. For Caleb Williams himself, who enjoyed the largest private practice in York, who was a much loved Quaker Minister and a lecturer on *Materia Medica* in the Medical School, he had the greatest admiration and respect, not only as a man but as a doctor and spiritual guide and friend.

The diary which J.H. kept whilst in York shows his astonishing mental development during those 5 years. He kept up his school studies assiduously, and read in French, Latin, Greek, and German, often using Greek and German translations of the Bible so that he might learn the languages and read the scriptures at the same time. In his diary he quotes from many prose and poetical works, including those of Dr. Arnold, Romilly, and Mackintosh; Byron, Hood, and Young. He quotes extracts from Pascal, Virgil, and Sallust frequently, whilst Todd's "Student's Guide" was his constant companion. Of course, he attended First Day services at his own place of worship, and also those at other non-Conformist chapels frequently commenting upon the contents of the sermons in his diary. In his spare time, he rambled over the countryside collecting botanical specimens and often rowed on the river Ouse in the early morning. Very soon, he determined to sit for the London matriculation examination, which meant rising at 4.0 in the morning in order to study before beginning his professional duties for the day. He found mathematics very difficult, but his diary is full of the most pointed exhortations to continue in self-discipline and in the Christian way of life. The latter very often follow the discussions of spiritual matters he had with Caleb Williams.

This period of apprenticeship at York had a remarkable effect on J.H.'s outlook and disposition. First, it brought him into intimate contact with the down-to-earth medical practice of his day. After only 2 years with Caleb Williams, he began to attend lectures at the York Medical School and walk the wards of the County Hospital. Although this school was always a small one, it produced besides J.H. one or two other distinguished men, of whom the best known are J. Hughlings Jackson and Dr.

Daniel Hack Tuke. On its staff it had one outstanding personality, Dr. Thomas Laycock, who lectured on clinical medicine and was developing his theory of the relationship between temperament and disease, a theory for which he later became famous when he was professor of physic at Edinburgh. Dr. Laycock and his teaching had a profound influence on J.H., who acknowledges his great debt to his lectures and example in later years.

One or two short extracts from J.H.'s diary may give a picture of his work at York.

"9th mo. 11th. Rose at 4. Dissected nearly all day. Was fetched from the dissecting rooms at 6.0 p.m. with the news that my companion Payne was gone to bed ill.

9th mo. 13th. Have had a busy night. Up 5 times Busy with a very tedious labour case which has been on ever since yesterday morning. It is the first at which I have used the plain language which I am sorry to say I have left off for so long.

10th mo. 4th 1847. Went at 12 to an inquest on a patient under my care who died very suddenly yesterday morning, took an affirmation for the first time and was subjected to a close examination.

10th mo. 6th 1847. Attended my 23rd midwifery case this morning. I have had them pretty frequently. I intend to get as many as I can. Large practice gives you confidence and assurance.

7th mo. 26th 1848. Went to Retreat to see most extensive case of sphaelus."

The second important event of this period in York is that J.H. came face to face with the problem of living the full life of a Quaker in a wider community outside the small country town of his birth, in the society of which his family occupied a well-defined and leading position and one protected by family customs. The specific occasion which tested him occurred on a visit he paid, with some female friends from Selby, to York Minster. Following the Quaker custom, he did not remove his hat and in consequence was asked to leave by the verger. This quite humiliating experience caused him a great deal of unhappiness and, with characteristic honesty, he confessed the whole incident in a letter to his father, expressing the view that, in all conscience, he felt that such Quaker customs and beliefs were petty and valueless. His father wrote back to reassure him, but this single incident started in his mind a chain of thought which led eventually to the severing of his connection with the outward customs of the Society of Friends. His diary records:

"6 mo. 2nd. Much as I am attached to the doctrines of Friends and firmly as I am convinced of the truth of the majority of their more essential points of dissent, yet I

cannot help candidly thinking that some of their minor peculiarities are mere 'foolishness.'

6 mo. 10th. Had the pleasure of seeing Father, Mother, and other Friends at the Monthly Meeting. In the evening, Father gave me a long piece of affectionate admonition on the subject of dress with a special reference to a new and 'unfriendly' hat which I now wear and which I am very sorry to perceive appears to have given him great offence. My duty of filial obedience is the only argument which at all concerns me. About the old orthodox Quaker argument I am quite easy for having thought much on the subject my deliberate conclusion is that the peculiarities of Friends with regard to dress and language are a piece of the most absurd folly ever intermingled with the religious system of any Christian sect."

A third important event which took place in this apprenticeship period was that he fell deeply in love with a young lady who lived in Selby. The affair came to nothing, chiefly because of the opposition of his parents, but the effect of this opposition on his morale was to plunge him again into a state of miserable introspection which his wider activities were helping him to grow out of. Entries in his diary record the depths of his unhappiness and it may be significant that not long afterwards he succumbed to an attack of the Irish typhoid and had to be nursed at home in Selby for 10 weeks.

This break of 10 weeks in 1847 gave J.H. a necessary period at this critical point in his life for a thorough mental and spiritual stock-taking. He had entered the relatively wider social life of York a somewhat morbidly priggish adolescent caught up in a spirit of missionary fervour and resolved to save his own soul by a complete dedication of his life to the spiritual well-being of his fellow men, using the practice of medicine as a means to that end.

When he returned to duty in late 1847 he did so as a far more settled personality. He was, of course, older, and more experienced in many aspects of life than when he first slept under Caleb Williams' counter, but what was far more important was the fact that he had resolved a number of very important problems. He now saw clearly that his life's work must be done in the field of medicine, for in following that profession lay his real interest. He also saw that along this path he could still fulfil all his hopes and plans for missionary work by determining to reach men's spiritual needs through a complete dedication to the healing of their infirmities. Furthermore, he accepted his emancipation from certain irksome Quaker practices although this meant some departure from his father's strict principles and so estrangement from his parents themselves. His mind felt much easier for all these decisions, and it was freed from a further burden in that he decided to

give up any idea of taking the London matriculation examination. Finally, he resolved to plunge himself wholeheartedly into the practice of medicine as he found it, to put aside all thoughts of young ladies, and to give each day's problems his whole mind and attention, examining, recording, and discussing fully all the cases he met in order that he might equip himself for the tasks ahead. The entries in his diary take on a new note of confidence as his energies are concentrated on the one purpose. He recorded more and more cases, he read more and more books from the Medical library of which he was elected a student member, and he joined in more and more discussions of purely medical matters of diagnosis and treatment.

So well did he prosper in this new resolve that in August 1848, when he was just 20 years of age, he was offered the position of House Surgeon at the County Hospital for a short period during the absence of the regular surgeon. He accepted the responsibility with eagerness, but wrote in his diary with candour and humility:

"It is very easy to look on and see patients presented for by others; but to examine in the midst of bustle and surrounded by a number of quizzing students a large batch of cases, many of them puzzling ones, and to give impromptu and record on the books a highly responsible opinion both as to prognosis and treatment of each is no slight work for the intellectual powers and I think I scarcely ever entertained a more humble opinion of myself than at the conclusion of this morning's work."

J.H. left York in 1850 and entered St. Bartholomew's Hospital Medical School to complete his studies for the M.R.C.S. and L.S.A., the "College and Hall" qualification to practise. He passed these in September 1850. During that short period he came under the powerful influence of James Paget, that notable teacher in the Hospital Medical School and warden of the students' hostel. There was a mutual attraction between the two men even in these first days when they were professor and student, and this ripened into a deeper friendship when J.H., having spent one year back in York as House Surgeon, much to the delight of his family in Selby, returned to London in 1851. Those first few months in London in 1850 had given him a taste for the capital city. During those student days, he learnt at first hand the misery, poverty, and degraded conditions of the submerged population of the city, as he spent his spare time working amongst them, chiefly through the Quaker Missions and the Westminster Working Men's Institute. When he returned in 1851

he was completely set upon the idea of working amongst the poor, either as a medical missionary or as the director of some philanthropic institution. Until such an opening occurred, he quite characteristically enrolled again as a student at Bart's under Paget, and here Paget's influence on his future becomes critical, for it was whilst attending Paget's lectures and outpatients department, that J.H. fell completely under the spell of his personality. Paget became more and more a friend and adviser rather than a teacher, and there is no doubt whatever that Paget, who was then delivering his famous lectures on surgical pathology at the Royal College of Surgeons, directed J.H.'s interest, already stimulated in York, into these channels. These lectures, called "Classics of Medical Science", have been described as models of the art of exposition. They were given by a master craftsman and illustrated by specimens from the great Hunterian collection at the College. Their effect on J.H. was to set his feet on the path of pathological inquiry, an aspect of medicine which stimulated his mind for the rest of his life. At Paget's suggestion he joined the Pathological Society, and also took out a year's ticket as a student at Moorfield's Hospital for Diseases of the Eye. These steps alone profoundly influenced J.H.'s future career, but what was of more immediate importance, Paget used his influence to get J.H. his first London post—as clinical assistant at the Liverpool Street Chest Hospital.

For the next two years, J.H.'s life follows two parallel courses. During the day he was a medical man and student of medicine, a young, keen member of his profession, eager to take every advantage of the countless examples of every kind of illness and abnormality in the greatest city in the world. This involved him not only in hospital practice, but in note-taking, and in visiting, examining, and discussing all types of cases with his contemporaries, amongst whom were his friends Joseph Lister, Daniel Hack Tuke, and John Hodgkin, who were all at the beginning of their careers. Then, during the evenings and at weekends, he was deeply engaged in philanthropic work amongst the poor and needy, centred upon the Quaker settlement at Spitalfields. At this settlement J.H. became a superintendent and in that capacity had to write long reports of its work and draw up tracts and pamphlets for distribution. Into this arduous task, he threw himself with all the vigour and determination of a missionary.

This two-year period was destined to mark a great turning point in J.H.'s career. In 1851, the two parallel streams in his life are quite apparent; by 1853, he had his foot on the lower rung of the ladder up which he was to climb to eminence; at the end of these 2 years, he was set fair on the beginning of that

remarkable career in medicine and surgery which was to bring him lasting fame and honour. In 1851 he was torn between what he increasingly wanted to do and what he felt he ought to do, but gradually the emancipating influence of Paget, the satisfaction he was experiencing in pursuing scientific medicine, the absorbing interest of his clinical researches, and the stimulation provided by London medical life compelled him to face and solve the problem of his future career. The stand he took is set out in a letter to his father written in 1853. In this he explained without any equivocation his decision to give up all idea of general practice or of becoming a medical officer for some charitable institution, and to follow his ambition to be a consultant surgeon and eventually to take his place amongst the highest ranks of the profession.

Having made that decision, J.H.'s life began to take on a new and increasingly powerful tone, which derived from the gradual adoption of a unique philosophy of life which he hammered out from his own experience of Quaker principles and the new scientific ideas and discoveries underlying the doctrine of evolution and the origin of species. After his experiences in York he remained content to continue outwardly in Quaker ways, but gradually he began to interpret the doctrine of the "Inner Light" more from the moral than the spiritual point of view. In addition he began to find the Christian doctrine of future rewards and punishments abhorrent, indeed he grew to believe that the whole Christian concept of a future life for the individual personality was quite untenable. Darwin's publication of the "Origin of Species" which made the doctrine of evolution scientifically respectable was, for J.H., a momentous occasion, and the reading of it, a revelation of Truth. Accepting all that Darwinism implied, he incorporated the essence of the doctrine of evolution into his own philosophy of life and this philosophy, which he called "Terralism", he found completely satisfying for the rest of his days. Indeed, only when viewed in the light of this personal and individual philosophy, does J.H.'s life's work become understandable. By the philosophy of "Terralism" J.H. believed that the accumulation of knowledge had the power not only to raise the standard of man's life, both individually and collectively, but also to emancipate man from the confines of his emotional life, and to lift him up to higher planes whereon he would gradually learn to recognize the needs of his fellow men and as he struggled to satisfy these needs would begin to possess even greater powers and more urgent desires to serve. In Terralism, knowledge was all powerful, but its possession was also a responsibility. Indeed, the accumulation of power was a divine command, not for the sake of

having greater power, but in order that those fortunate enough to possess the means of gaining new knowledge could the better lift up the standard of their less fortunate brothers. When he read Darwin's "Origin of Species", J.H. realized at once how much the beliefs contained in it completed his own philosophy, for it showed him that personal immortality was possible in the sense that those attributes in an individual's character which were favourable to a higher standard of life could become fixed in the character of the offspring and so in time could raise the general level of the stock. Add to this the power of human intelligence and will to choose the type of attribute for passage into the stock, and J.H.'s philosophy becomes complete by the inclusion of a doctrine of immortality. A man, he believed and taught, continued to exist virtually in his offspring and spiritually in the influence which his life exerted. It is, therefore, a man's whole duty to raise the common life of mankind by ruling and ordering his own life in whatever sphere he finds himself with all the greatest thoughts and noblest aspirations available and then to search for and scatter abroad new knowledge and truth as fully as his circumstances allow.

However mistaken and "Victorian" J.H.'s philosophy may appear, the sincerity with which he held it and the tenacity with which he lived by it cannot be doubted. He ordered his life for the next 50 years in full accord with its teachings and preached it during his last years with unrelenting fervour and zeal. In 1853, it was too new and he was too busy to more than make his first ventures of faith in its rightness, but all his future acts, his subsequent non-professional publications, and many of his professional ones, too, together with his lectures to societies, Colleges, and students must all be judged in the light of this very personal philosophy of life.

The 6 years, 1853-1859, which followed upon his decision to become a consulting surgeon in London, form an important introductory period to his subsequent career, for it was during this time that he laid the foundations of all his future achievements. In 1853, he obtained his second hospital appointment, that of assistant surgeon in the Metropolitan Free Hospital, and very early he began to show evidence of independence of mind. One operation, that of treatment of stone in the bladder, fell to his lot in the operating theatre more than any other. As he followed the then general custom of lithotomy for treating the condition, he found that his results were bitterly disappointing. He concluded that, in the hands of all but an expert, this technique was doomed to failure and so he immediately reverted to lithotomy. This courageous independence of judgement at 25 years of age in his first surgical post was

an early indication of a characteristic trait which became more and more noticeable throughout his life.

But his appointment at the Metropolitan was to prove of much more far-reaching importance than anything to do with surgical techniques. Very early in his clinical work, his interest was aroused by a very severe case of "strumous" disease of the skull bones in a young man whose mother had had syphilis. In searching for an adequate method of treatment, he found that the position respecting the diagnosis of hereditary syphilis in older patients was exceedingly confused. This confusion challenged his diagnostic skill and for the next 4 years, he made an intensive clinical study of known cases of hereditary syphilis, concentrating especially on the appearance of any signs in both young and old patients, which could be separated out as diagnostic. He used his attendance at the clinics of Critchett and Dixon, the surgeons at Moorfields, to pursue the same problem at that hospital, and he also joined the out-patients at Blackfriars Hospital for Diseases of the Skin for the same reason, obtaining permission from Mr. Startin, the surgeon, to study every case of known hereditary syphilis admitted to his clinics. In this inquiry, J.H. showed not only outstanding zeal and enthusiasm but a real flair for clinical examination and research, and soon he had established to his own satisfaction at least that patients with hereditary syphilis exhibited a characteristic form of iritis which was diagnostic of their condition. Here at hand, then, was an extensive field of clinical research ready for cultivation. There is no doubt that the success which attended this first excursion into clinical research showed him what were his real gifts and this knowledge stimulated him to further research into the problem of hereditary syphilis. He embodied the results of his work in his first book, published in 1863 and called "Syphilitic Diseases of Ear and Eye". This brought under one cover the results of these clinical researches which he had pursued for 10 years, at four hospitals and which he had published in parts mostly in the hospital journals. It established the thesis, which was supported by overwhelming evidence from 300 case histories, that the presence in a patient of peculiarly notched teeth, interstitial keratitis, and otitis, was diagnostic of the presence of hereditary syphilis. This book, now considered to be amongst the classics of clinical medicine, immediately established J.H. as an authority on the disease and "Hutchinson's triad" became a password in the profession. From that time, at 35 years of age, he became the syphilis specialist and his interest in the "great imitator" as he named the disease, never

waned. Amongst all his other specialties, his work on syphilis and venereal diseases in general is perhaps the best remembered. It has been said that during his life-time he saw a million cases of syphilis. Even if this is an exaggeration, what is certain is that, whenever he pronounced upon any aspect of the disease, he was listened to with acute attention and respect, if not always with complete agreement. In this field more than any other, he acted as a stimulant to other men's thoughts and minds, for, although his pronouncements were made with that slow forthright style and with full examples from a wide circle of experience, the very range of his knowledge invited other men's criticism and bred an urge on their part to try to prove him wrong. They found him a formidable adversary in debate and discussion, but one always ready to give them the full benefit of his knowledge and experience.

In addition to establishing the value of his triad in the diagnosis of hereditary syphilis, J.H. contributed much more to the medical knowledge of the disease of syphilis in later years. He was amongst the first to declare his conviction that the disease was due to a specific "virus" introduced into the body by contagion, that it was a specific fever, with a beginning, a middle, and an ending, and that its course, even when it manifested itself in its three phases, could be allayed by a specific drug, mercury. Indeed, Hutchinson's mercury pill became almost as famous as his triad. He was always emphasizing the variable and misleading character of the clinical signs of syphilis, but perhaps his greatest contribution to the study of syphilis as a disease was his unvarying insistence that it should be taken seriously at every stage of its progress. From extensive clinical and pathological evidence he drew attention time and time again to the deep ulcerations which could and did accompany the disease at every stage and always deplored any attempt to make light of the effects of the primary and secondary stages, and to consider that the tertiary stage alone was accompanied by grave internal lesions. "A disease" he said in 1876, "which could and did affect the skin must have some profound effect on the internal organs." This was important teaching in an age when many general practitioners thought little of the disease and treated it in the haphazard manner which they used for other mild, feverish attacks, for in emphasizing its severity and the extensive nature of its manifestations he was clearing the air as well as pointing out gaps in the knowledge of the disease, and so accepting the responsibility which his position as an authority demanded of him.

In 1855, there occurred an incident which had the most far-reaching consequence on his future and

explains a great many of his subsequent activities. In that year, he was offered a government appointment to tour the civil and military hospitals in the Crimea to investigate the diseases prevalent, to lecture to the medical staffs, and finally to prepare a report. The post carried a salary of £100 per month and there would be four assistants. In a letter to his father in Selby he set out the whole details and wrote enthusiastically of his intention to accept such a splendid offer, carefully and emphatically underlining a statement that the post was in no way connected with the military system. The reply from the old Quaker was immediate, direct, and unequivocal. His son must refuse the tempting offer as it was against all his family's principles and could only bring unhappiness and estrangement from his family and friends. Reluctantly, even when all his friends in London, with Paget amongst them, were urging him to accept, J.H. sent a letter of resignation to Sir James Clark, and only the entries in his private diary which revert in tone to those early days in York reveal what this act of filial obedience meant to him, a young man of 27 years of age at the outset of his career. One must remember, however, in judging the incident, that in spite of his good position in London medical circles, J.H. was financially dependent on his father and, in addition, had just recently met the girl who was to become his wife. Such considerations as these must also have influenced his decision. In the midst of his despair, however, came a new, and as later events proved, a far more influential offer for which his friend Paget was responsible. He was offered, and accepted, a post of a similar nature on the *Medical Times and Gazette*, which entailed working under the direct supervision of Spencer Wells, to survey and report on current surgical techniques. The far-reaching importance of the post can be judged by the fact that it not only brought J.H. under the direct influence of another great personality in contemporary medicine in the person of Spencer Wells and so introduced him to the detailed work of, and the controversy surrounding, the surgical technique for ovariectomy, but it also meant visiting almost every London hospital and many provincial ones to prepare the survey of surgical practice, and examine procedures adopted by surgeons in performing a large variety of operations.

For 3 years, J.H. carried out this survey for the *Medical Times and Gazette* in quite elaborate detail, collecting personally, with scrupulous regard for accuracy, records on the practice of a large number of operations. These records were published between 1855 and 1858 and give one of the most accurate pictures of pre-Listerian hospital practice in existence.

J.H. reported on over 300 operations of every type and during those 3 years was in constant and confidential communication with all the leading surgeons of the day. The effect on his surgical technique was profound, for it was like being an apprentice to the whole profession of surgery. When, in later years, he had occasion to speak of the practices of certain surgeons or the procedures used in certain hospitals, his hearers often forgot that he spoke from a first-hand knowledge of their work and that when he advocated some technique contrary to practice, he did so out of a wide experience of many surgical methods. During his 3 years acquaintanceship with Spencer Wells, J.H. achieved one small personal triumph. He worked hard with Spencer Wells to revive the operation for ovariectomy which had fallen into disrepute because of the slender chance of the patient's recovery due to the risk of septicaemia. Spencer Wells advocated the method in which the stump of the pedicle was left outside the abdomen during the patient's convalescence and J.H. invented a clamp to secure the end of this stump. It was generally thought that by this method any degeneration of the pedicle outside the abdomen could not affect the peritoneum and cause septicaemia. Under Spencer Wells' technique of absolute cleanliness and by his great skill as an operator, the operation showed signs of a successful revival and, although Lawson Tait the other expert in ovariectomy, later called J.H.'s invention "Hutchinson's murderous clamp", yet in those days of pre-Listerian surgery, it served its purpose in helping Spencer Wells to revive the possibility of successful ovariectomy and so pave the way for Tait's later successes.

One further effect which this 3-year survey had on J.H.'s practice was that he stopped performing certain operations and sent his patients to those surgeons who, to his certain knowledge, were experts in that particular field. This deliberate restriction of his hospital practice is indeed highly commendable in the days when young surgeons had reputations to build up and sustain and when, in order to establish himself in his profession, a general hospital surgeon usually accepted anything which came his way.

In 1855, there occurred an event in J.H.'s life which some writers have said constituted his greatest contribution to medicine. John Hughlings Jackson, who was 7 years J.H.'s junior, came up from York Medical School with a personal introduction to him and thus began an abiding friendship cut short only by Hughlings Jackson's death in 1911. Hughlings Jackson's career up to 1855 had followed closely that of J.H. himself. He was a Yorkshire man, born

in Green Hammerton, and as a youth was apprenticed to Mr. Anderson, Surgeon and Apothecary of York. He in his turn attended York Medical School, and was also thrilled by the lectures of Dr. Laycock who now included in them some teaching on neurology and mental disorders. There is no doubt at all that these influenced Hughlings Jackson in his subsequent choice of his sphere of work in the field of medicine. Like J.H., he came up to Bart's to finish off the course for M.R.C.S. and L.S.A. under Paget, and lived as a boarder with J.H. and his wife. After qualifying, he too returned to York as House Surgeon but in his case at the Dispensary. In 1859, Hughlings Jackson, tired and dispirited with medical practice, left York and came to live again with J.H., with the intention of studying philosophy. It was J.H., during these rather difficult months, who finally persuaded Hughlings Jackson to develop his past interest in neurology and mental disorders and to this end, he obtained for him the post of Physician at the Metropolitan Free Hospital. Later on, he obtained for him the post of Physician at the London Hospital and thus, encouraged by one who had made for himself his own secure place in London medical circles, Hughlings Jackson began those series of researches in neurology and mental disorders which to-day make his name honoured in medicine all over the world. There is a great deal of truth in the remark that Hughlings Jackson was J.H.'s greatest contribution to medicine.

By 1875, J.H. was well on the way to becoming one of the best known and most promising of the younger group of London surgeons. However, ambitious as he undoubtedly was for recognition, the many letters in existence show that he trusted for that recognition not only to hard work but also to the character of his approach to his profession. They show his determination to follow the truth as he saw it, irrespective of outworn tradition or vested interests and to spare neither time nor effort in making himself as fully conversant as possible with all that was best in contemporary medicine. One direct consequence of this was that he joined many societies devoted to both general medicine and its specialized branches, and through these he not only published a great deal of his work but in the meetings at which he was a constant attender, he expressed his views with growing authority and confidence, and heard them criticised and discussed by those best qualified to do so. An early opportunity to benefit himself professionally, and medicine in general, came in 1857 as a direct result of his membership of the Sydenham Society. From his student days in York, he had been a fervent admirer of Sydenham's works and soon after coming to London he had become a member

of this old London Society, whose purpose was to publish at intervals important but inaccessible works of ancient and foreign medical authors. In 1857 the membership had declined to such an extent that the meeting then in progress had been called with the express purpose of winding up the Society. J.H., who prized greatly some of the volumes published by the Society, was the only one who spoke against the motion of closure and, in consequence, although the Sydenham Society as then constituted ceased to exist, he was challenged to reform it and run it in the way he had suggested, that is, as a Society whose purpose was to publish only the best of the modern Continental medical and surgical works. Accepting this challenge, he received strong support from most of the younger men present at the meeting, and from that year the New Sydenham Society began its 50 years' existence. For half a century it published for an annual fee of one guinea, a long list of translations of all the best books written by Continental surgeons and doctors, as well as, later, many collected editions of the works of British authors. Throughout its existence, J.H. remained its active secretary and some of the greatest names in Victorian medicine and surgery occupied its presidential chair. In this work, often arduous and exacting, J.H. found lasting joy, for he believed whole-heartedly in the mission which the Society had undertaken. From the start, he gave the most careful consideration to its affairs, as well as his abounding enthusiasm, so that as it flourished, his own name was carried outside the confines of British medical circles and his contacts abroad soon included all the great names in Continental medicine. With many of these men he formed lasting friendships, and with many he stayed during his increasingly frequent visits to Europe, and many of them, too, enjoyed the hospitality he dispensed in his houses in London, Reigate, and Haslemere.

To some men, marriage is often the turning point of their career, the keystone of their lives, but this cannot be said of J.H.'s marriage to Jane Pynsent West which took place in 1856 at Stoke Newington Meeting House. Jane was the daughter of William West, F.R.S., of Leeds, and J.H. fell in love with her during a visit to Stoke Newington. The marriage was the normal fulfilment of the act of falling in love and these two oddly assorted persons remained deeply in love with each other throughout their lives. The circumstances of their married life were unusual. For the first few years, they lived at 4 Finsbury Circus, but as J.H.'s financial position improved his wife and growing family spent longer and longer periods in various country houses which J.H. rented during the summer months, and they finally made their home in country residences first at Reigate and later

at Haslemere, whilst J.H. lived the life of a busy practitioner in a London house, attending meetings of Societies, writing papers and books, acting as secretary, and at the same time fulfilling all the arduous duties of a practising surgeon at four busy hospitals. In consequence of these long periods of separation there is in existence a great number of letters which J.H. wrote to his wife at the end of almost every working day. That they loved one another with a deep and abiding affection emerges fully from these letters, but what also emerges is the beauty of the character of Jane Hutchinson. Whilst J.H. moved away from the strict religious ground of Quakerism and found his satisfaction and contentment in that philosophy of his own making, his wife remained a convinced Christian within the confines of the membership of the Society of Friends, where she performed with gracious humility the tasks of a minister. In the letters he wrote, J.H. sought by all the skill he knew to convert her to his own way of thinking, not so much by criticising her beliefs but rather by trying to persuade her of the superiority of his own "better way". Although her letters to him were not preserved, it is evident that she never accepted his philosophy but continued in her own quiet way to oppose all his arguments with her strongly-held convictions of the unassailable truth of Christianity. There is evidence that, after some years, her growing unhappiness at J.H.'s steady departure from orthodox Quaker beliefs reached a climax, and, although he continued his efforts to convert her to his own beliefs, he did so ever after this crisis with a far gentler touch. One gets the impression that Jane Hutchinson was of an exceedingly sensitive nature, intensely musical and artistic, and moreover steeped in her Bible. She was a loyal member of her Society, and completely immovable on the question of her faith. She found a valued place in the Society's activities as a minister, a Sunday school teacher, and a constant attendee and worker at missionary and Peace committees.

These two characters, so different yet held together by the firm bonds of mutual love, met on the common ground of family life. To both of them, their ten children were the source of their deepest happiness. Over their beliefs and religious views they differed, but they were as one in their devotion to their family, a devotion which J.H.'s letters portray most poignantly when their youngest son, Bernard, died of tetanus in 1884 after a trivial accident.

Jane Hutchinson died in 1887 after 31 years of married life, during which she devoted herself completely to the happiness of her husband and her family. As mentioned above, J.H. wrote to her almost every day during their periods of separation. His letters

are full of his day to day doings: items about his consulting practice, news of his fellow doctors, comments on the books he was currently reading, the people he met, the hospitality he enjoyed, and the lectures and addresses he was preparing. It never seems to have been burdensome for him to write to her; indeed one might say that perhaps he would never have been able to endure the burden of his crowded life unless at the end of the day he had been able to open his heart to one who understood him better than he realized.

In 1862, J.H. passed the examination for the Fellowship of the Royal College of Surgeons and in the same year was elected Assistant Surgeon at Moorfields, where he and Hughlings Jackson had been clinical assistants since 1857, and where J.H. had contributed many articles on inherited syphilis to the Hospital reports. At this period, his diaries show a steady and welcome increase in his consulting practice, and in his contributions to the learned medical societies, and, consequent upon his exacting clinical work at Moorfields, the beginnings of a lifelong friendship with Bowman and Donders. The year 1863, however, saw an even greater extension of his surgical responsibilities, for in that year he was elected surgeon at the London Hospital, and was at the same time instrumental in getting Hughlings Jackson elected an assistant physician at the same hospital. This additional responsibility brought to an end the long series of reports he had been furnishing for the *Medical Times and Gazette*, and the additional articles which he and Hughlings Jackson had been supplying to the same journal since 1860. 1863 also saw the publication of his book on inherited syphilis. Although this marked the end of a long period of exacting clinical observations, he had already begun to collect evidence on another entirely different problem, the cause of leprosy. For some years this ancient disease had intrigued his imagination and, after collecting a great deal of evidence, he published in the London Hospital reports an outline of the evidence for the conclusion he had reached that leprosy was caused by the consumption of badly-cured fish. For the rest of his life and in face of the united opposition of all the other members of his profession, he never budged from that belief. So completely and, indeed, so stubbornly did he believe his thesis that in his later life he made long voyages to Norway, Egypt, the Middle East, and India to gather material in its support. The discovery of the leprosy bacillus by Hansen of Norway in 1874 made little difference; J.H. simply rearranged his basic belief to accommodate the fact, retaining badly-cured fish as the true predisposing cause, so that in his last book, "On Leprosy and Fish

Eating" published in 1906, he gave to the world one of the most fascinating expositions of a theory which no one believed. It would not be true to say that it was without any effect on the treatment of leprosy. From the early days, he taught that the disease was not as contagious as people thought and this did have the effect of some modification in the attitude of the public towards those who had the disease, but that seems the only permanent good to arise out of his teaching. Although there is nothing to substantiate it, there was a persistent rumour current when J.H. accepted a knighthood in 1908 that he did so in order to commend his teachings on the cause of leprosy not only to the members of the medical profession, but also to the general public and to those who had the best interests of the Colonies at heart, hoping to rally every kind of influential opinion to the task of stamping out the consumption of raw fish and so the spread of leprosy. Whether there was any truth in the rumour or not, it is true that for the 50 years from 1863, J.H. returned over and over again to his thesis of the cause and cure of leprosy and championed it with a single-mindedness of purpose which demands admiration. If one can forget for a moment his basic thesis, one finds an astonishing wealth of clinical material in all the papers, addresses, and reports which he published on the question of the cause of this world-wide and ancient scourge, sufficient indeed for one man's work over a lifetime but almost unbelievable when added to all the other varied interests which go to make up the career of this one man, whom Professor Herkheimer once called, in admiration, the "Universal Specialist."

By the end of 1863, then, J.H., at 35 years of age, was well established in his profession. Holding surgical appointments in four of London's important hospitals, the London, Moorfields, Blackfriars Skin, and the Metropolitan Free Hospital, he had a wide field in which to exercise his surgical skills and to develop clinical researches in those specialties of syphilis, leprosy, ophthalmology, and dermatology in all its branches. His journals and letters show that he was "an eager operator", but at the same time they show that he still held to his view that it was better, for the patient's sake, to send cases to those surgeons who were more skilled in operating on certain conditions, such as ovariectomy and stone.

During the next 10 years, he consolidated his position in professional society, developed his personal philosophy of Terralism and used it increasingly in his addresses, and became more and more, as his position demanded, actively involved in the controversies which surrounded the introduction of Lister's technique in surgical operations.

As far as consolidating his professional status is

concerned, this was helped by two invitations: to write the section on "Surgical Diseases in Women" in Holmes's "System of Surgery", and to write the article on "Constitutional Syphilis" in Reynolds's "System of Medicine." The former, being a product of pre-Listerian medicine, is now of no particular importance, but the latter is significant, not only for J. H. himself in that it is an explicit recognition of his position as a leading authority on the disease, but also because in it he expresses his belief that syphilis should be classed as a specific fever, having a specific cause and running a specific course in an individual. This proposition, novel and revolutionary in 1863, did not gain acceptance for a considerable time but eventually led to the development of methods designed to prevent the disease as well as to cure it.

In an entirely different field, his reputation was also enhanced by the award of the Ashley Cooper Triennial Prize of £300 for an essay on "Injuries of the Head and their Treatment." This award in 1865 was a tribute to his versatility, for the subject is obviously a surgical one and quite removed from much of his current clinical interests. Nevertheless, his competence to write on such a subject cannot be challenged because the rate of admission of accidents to the London Hospital was very high, situated as it was in the East End dock area.

The year 1865 saw a significant change in the organization of his family life. J.H. had always suffered from attacks of migraine and his letters at this period reveal that the attacks increased in severity. He realized that while he remained tied to a London home he would always overwork, so he bought Stootley Farm, near Haslemere, as a permanent country home and in it he installed his wife and five children, using it himself as a weekend residence and as a relief from the pressure of his London commitments. During the week, however, he continued to live at 4 Finsbury Circus with Hughlings Jackson, Waren Tay, and Edward Nettleship, the last two being his junior colleagues at Moorfields. This became the pattern of his future life. He soon became the acknowledged leader of the little group all living in the same house, and especially did he, as the stronger character, dominate Tay and Nettleship, both of whom were ophthalmologists. Hughlings Jackson, in his own quiet way was a little more self-assertive and what was more, was steadily making his way in his own separate field of neurology. It was not long before Hughlings Jackson left the group, for, on the advice of his friend Brown-Séquard he accepted a post as assistant physician at the National Hospital for the Paralysed and Epileptic, and this, with his other two appointments, gave him both the means and the incentive to marry his cousin in 1865 and to set up house in Manchester Square.

Hughlings Jackson enjoyed eleven years of happy married life and during that period, using the material which he gathered from his clinics at the three hospitals, laid the foundation of his fame as one of the greatest neurologists of all time.

1865, too, is the year when J.H. was invited to give the first of the many addresses he was destined to give to learned societies, an indication not only of the esteem in which he was held by his professional colleagues but of the position he was beginning to occupy in wider medical circles. The address was the annual oration before the Hunterian Society and was entitled, following Sydenham, "The Advance of Physic". The contents of this paper are remarkable in that they show a maturity of judgment, a breadth of view, and a basic commonsense on contemporary science in general and on the profession of medicine in particular, which are worthy of a much older and more experienced mind. Not only does the paper show a powerful grasp of principles and wide reading, but it excels in the way it looks forward to those improvements towards which J.H. thought that the whole profession of medicine should aspire. In retrospect, all J.H.'s later work is explicitly stated or implicitly woven into the fabric of this address. It contains, of course, much that is controversial and a number of typically dogmatic statements, but nowhere is there a thought or a conclusion which is not of his own careful making and nowhere an exhortation to make a deeper study of medicine which he was not carrying out to the fullest extent of his powers. At that very moment he was ploughing back into general medical practice his discoveries from the specialist hospitals, he himself was putting into the hands of the general practitioner new weapons to use for accurate diagnosis. He did travel, not for travelling's sake, but to visit some new territory in pursuit of fresh knowledge, he did eschew time-wasting frivolity, and read and gathered together every scrap of modern work in every sphere which touched his profession even remotely, and he did hold before himself the goal of truth to be reached along the way of an upright and moral life. This first presentation of his professional beliefs contains much that he was later to enlarge upon in his many addresses and gives a vivid picture of his beliefs and opinions at this period of his life.

From this year, and in a great degree as the result of this address, J.H. added this further sphere of activity to his many others; he became orator and lecturer to the many learned societies of which, one by one, he also became president. Perhaps this is as good a place as any to record his remarkable achievement of presiding over almost every medical and surgical society in London. As mentioned above, he

had joined the Pathological Society on Paget's recommendation and he became its President in 1879. He became President of the Hunterian Society in 1869, of the Ophthalmological in 1883, the Neurological in 1887, the Medical in 1890, and the Royal Medical and Chirurgical in 1894. Finally, and of this more later, he became, with Joseph Lister, a Vice-President of the Royal College of Surgeons in 1886 and its President in 1889-90, delivering the Bradshaw Lecture to the College in 1883, the Lettsonian Lecture in 1886 and the Hunterian Oration in 1890. This is an outstanding list by any standards and is a remarkable tribute to the esteem in which he was held by every branch of the medical profession. To each presidency, he brought his great gifts. In the first place, he developed over the years a unique skill in presenting to each different society a presidential address which was stirring and stimulating to the members of that very society, and in every case, followed it up with new ideas during his term of office which, although often controversial, were always forthright and directly applicable to the prevailing conditions. His motives were always to stimulate thought and study, to encourage debate and discussion, whilst keeping before the members of each society their prime responsibility to follow truth in their own discipline without fearing where it would lead. In this stimulus which J.H. gave to the work of each society lies perhaps the most valuable and permanent contribution he made to his profession, for in this work he was acting as a catalyst to the activities of the members of the whole medical profession of his day. He stimulated his contemporaries to think, to test, to learn, and to apply their results for the good of suffering mankind; they in turn found him a skilful debater with a phenomenal memory and a wealth of experience on which he could call and which he was always ready and willing to place at their disposal, just as he was always ready to listen to their opinions, although not one fears quite so willing to give up his own.

When money became a little more readily available with his growing consultant practice, J.H. began to travel abroad and visit the countries from which the New Sydenham Society drew its authors. Sometimes he went with Hughlings Jackson, sometimes with his wife, occasionally with one of his children, but in every case, these were "busman's holidays". In 1869, he and his wife visited Norway and stayed with his friend, Dr. Broeck. He used this visit to investigate the position of leprosy and its treatment in that country, and made his first acquaintance of Dr. Hansen, who soon became one of his great friends. The information he gathered about the aetiology of the disease and the diet of the inhabitants of Norway

confirmed him in the correctness of his theory of the cause of leprosy. In 1872, he and his wife visited Aix-la-Chapelle, Berlin, Leipzig, Dresden, Prague, Vienna, Munich, Salzburg, and Cologne, and were the guests of Hitzig in Berlin and Hebra in Vienna. In every town, J.H. visited hospitals and clinics, storing up vast amounts of information about cases and methods of treatment. In 1874, he visited Professor Esmarch in Kiel and went to visit the hospitals and museums in Copenhagen. In 1876, he went to Rome, chiefly but not entirely to visit the museums, and then in 1885, he stayed in Utrecht on the occasion of the jubilee of his friend Donders. But it was a fortnight's visit to Paris in 1867 which set him on a new venture which again profoundly affected his entire outlook. As usual, he visited an astonishing number of hospitals and clinics, including the wards of M. Guérin at the *Hôpital St. Louis*, the dermatological clinic of M. Bagin, the wards of M. Gosseln at *La Charité*, and the clinics at the Hospital for Sick Children, but what captured his imagination most during his visit was the great Dupuytren Pathological Museum. To this he returned over and over again to view with ever increasing interest and excitement not only the unique collection of specimens there displayed but the way in which the collection was organized to present the fullest information to the inquirer. This visit convinced him beyond any doubt of the overwhelming value of a well-equipped and properly organized and arranged museum in the education not only of the medical student but also of the post-graduate practitioner; indeed one can say that the result of this visit can be seen in all his later work for the education of every grade of medical man, and finally beyond that for education in its broadest sense for every man. Indeed the year 1868 may be called J.H.'s museum year, containing as it does the first stage of an original idea, which he started to carry out with characteristic zeal and enthusiasm, for the idea was so much in tune with his philosophy of Terralism which taught that those who knew must make their knowledge available to their fellow men through every kind of channel of communication.

After a short time, the idea of the museum as the basis of education in all spheres of life captured his imagination completely and as he developed this throughout the rest of his life, he became acknowledged as one of its greatest exponents. Gradually, it took on the nature of a crusade and culminated in the founding not only of purely educational museums but also of those devoted exclusively to medical education, and even included a daring attempt to reorganize the great Hunterian Museum of the Royal College of Surgeons to make it the active post-graduate teaching centre J.H. thought it ought to be.

J.H. developed his museum idea of objective education along three lines.

First, he began to add vigorously to his own growing collection of illustrations, casts, and specimens of diseased conditions. He had always been a collector of medical curiosities and his ever-deepening interest in skin diseases had resulted in a collection of unique illustrations of the many common and rare skin conditions met with at the London and Blackfriars Hospitals. Now he began to add to those by employing an artist to visit the wards and paint the truest possible pictures of all types of skin lesion. He also began to mount his illustrations, attaching to each clear descriptions and every kind of information taken from current literature. In addition, he began to experiment with plaster and wax, making casts of abnormalities, and to add to his collection of preserved diseased organs and tissues.

Secondly, in 1868, he wrote a letter to the *British Medical Journal* in which he advocated the setting up of an Annual Museum for the exhibition of objects of professional interest which had been collected during the year, objects which should include not only new inventions, but wax models, casts, illustrations, and interesting pathological specimens. The British Medical Association took up the idea with interest, and at Oxford that year the first "Annual Museum" was a great success, especially the part which included the drawings and wax models of pathological and dermatological conditions which J.H. had contributed from his growing collection. This practical demonstration of the value of such an exhibition stimulated J.H. to continue with even greater zeal along the same lines, and year after year, the museum at the B.M.A. Annual Congress continued to draw crowds of delegates and visitors. To J.H., this was medical education at its most fruitful, the results of a few men's labour being widely disseminated by clear illustration and discussion for the lasting benefit of all. From this early success, the idea of a permanent museum of clinical illustration of disease soon crystallized out in J.H.'s mind, and in many of his subsequent addresses, he threw out the challenge to the profession to establish one. When it was quite obvious that the challenge would not be heeded, J.H. himself, at his own expense, showed the way by establishing in 1893 his own private "Clinical Museum" at 1 Park Crescent, Regent's Park, the house he had purchased as a residence for his eldest son, Jonathan Hutchinson, Jnr., F.R.C.S. The back garden of this house was enclosed by high walls and using these as supports he had the garden roofed over with glass. Inside the light and airy room so formed, he had the walls panelled with match boarding, and ledges and shelves built, with cupboards below, for

the display of illustrations and models, and the storage of explanatory material. J.H. himself was the central figure of this museum, giving demonstrations and lectures to any group of medical men who cared to pay him a visit. So popular did the idea become that in 1898, with the help of other members of the profession, he advanced money to purchase larger premises in Chenies St., and there was launched the "Medical Graduates College and Polyclinic". In these more commodious premises, the museum was enlarged and expanded, and there was much more room for post-graduate lectures and demonstrations which were given after 5.30 p.m. to subscribers who were charged an annual fee of one guinea. During one quarter in 1905, the College sponsored fifty lectures and demonstrations, amply fulfilling the task it set out to do, and at the same time it possessed and used to the full what Osler once described as the finest collection of pathological illustrations in any country. The greater part of that great collection had been donated by J.H. himself.

In this development of the idea of the role of the museum in medical education, reference must be made to J.H.'s experience with the members of the Royal College of Surgeons and the outcome thereof. Along with Lister, he was appointed a Vice-President of the College and in 1888 he delivered the Bradshaw Lecture, taking for his theme "Museums and their relation to Medical Education and the Progress of Knowledge". In 1889 he was elected to the high honour of Presidency of the College but, instead of occupying the chair for the customary 4 years, he resigned after one year. The clue to his resignation can be found in the theme of the Hunterian Oration which he gave in 1891, again on "Objective Education and the Use of Museums". It seems that, following in the footsteps of John Hunter, whom he greatly admired, J.H. expressed the view that the Hunterian Museum, whilst keeping Hunter's unique collection as a nucleus, should reorganize its whole policy and direct its growth into those channels whereby it would become a lively centre for the clinical illustration of pathological conditions in the living human organism and so become a place of pilgrimage for surgeons wishing to study the manifestations of disease in living men. It seems that the idea was far too radical for the members of the College and, when they gave the suggestion very little encouragement, J.H. resigned from the presidency. A short time after his resignation, never despairing of the task of making the College see the rightness of his views, he offered its members his great collection of clinical illustrations as the nucleus of a lively museum, but the College declined the offer.

It was this unkind gesture which decided J.H. to do the work himself, for he was the kind of man to accept the responsibility inherent in his ideas. He had come to believe in this method of education through illustration and one must not forget that he was a product of stubborn Yorkshire stock, reared in the Quaker tradition and fully convinced of the soundness of his views.

Thirdly, encouraged by the success of his experiments on the use of museums in medical education, particularly as the whole conception fitted in so well with his philosophy of life, J.H. sought to extend the idea to cover general education. Although not the first to advocate the use of educational museums in general instruction, he was the originator of a specific plan upon which they should be built, organized, and run, and one of the most ardent exponents of the view that they should be centres of lively instruction and exposition. To J.H., an educational museum should illustrate the development and growth of man through time, and should have at the very centre someone who could use the contents of the museum in such a way that those who visited the collections and listened to the lectures would be thrilled with the story of man's great and wonderful past, and by it learn what sort of men and women they themselves were, and what they should strive to become having so great a heritage. He himself, by his own intellectual exertion, had grasped the knowledge of the meaning of life implicit in the theory of evolution and understood its power to liberate the mind from narrow selfishness, and this knowledge had so illuminated his own life that he felt the urge to pass the message on to those without his intellectual perception. As the avenue through which his teaching could best reach all who would listen and learn, he chose not books but the educational museum, organized in such a way as to illustrate the upward struggle of man by every kind of illustrative device, and capable, unlike a book, of rearrangement and variety. At the centre, he stressed that there must be a lecturer, a teacher who would use the contents and design of the museum as an illustration in itself, as a tool to reach and stimulate the minds of those who came to learn.

The first museum which J.H. built and organized on these lines was at his country house, Inval at Haslemere, in 1891. Here, by using light timber-work and matchwood linings he converted the barns behind the house into long galleries. The walls he painted black with white stripes to divide the area into thirty divisions, each representing a million years of geological time. The last division was small and represented the comparatively short period of man's existence. Shelves and cupboards in each division contained illustrations, specimens, and drawings of

rocks and any living creatures which flourished during that era. In the second gallery he repeated the design but painted only forty divisions representing the centuries of historic time, 2,000 years before and 2,000 years after Christ. Again, each division contained numerous illustrations of the flora and fauna, the historical events, the architecture, and the people of the period. Spread out on tables throughout the galleries were great numbers of every sort of geological and biological specimen, and all other items which go to make up the contents of any museum. These were usually purchased by J.H. himself from sale rooms, or given by interested visitors, and occasionally included living creatures. J.H. himself was the curator and lecturer, and his first audiences were composed of his own children and their young relatives and friends. But soon, more and more older people came as the fame of the museum and the lectures spread from Inval to the town of Haslemere and beyond. It was unlike any other museum, in that visitors were encouraged to handle the specimens, but its special feature was the lectures which J.H. gave each Sunday afternoon. These ranged over a wide area of knowledge and introduced science, philosophy, poetry, and religion, but the theme was always the wonder of nature, the greatness of man's works, and the glorious destiny that could be his. So successful did this venture become that, in 1894, J.H. obtained larger premises in Haslemere itself and founded his now nationally famous Educational Museum. On the same design as before, he built up a wonderful centre of objective education, based on his "Space for Time" method and augmented by every device for effective illustration. From the first, it became the centre of the local Natural History Society and to the members of this society and all who would come to listen J.H. continued to lecture on Sunday afternoons, whilst on Friday evenings, he organized series of lectures by famous scientists whom he entertained at Inval. The day-to-day work of running such a museum on these lines was in the hands of a paid curator whom J.H. trained himself and who so faithfully carried out his teaching that the museum still exists to-day, still the embodiment of "objective education" at its best. J.H. continued to lecture there until well after his 80th birthday and this may have been the reason for its continued success. He founded a similar museum at Selby, his birthplace, but this is no longer in existence; it died of the lack of a permanently resident J.H., although he frequently came to Selby to lecture. Again, these lectures were held on Sunday afternoons and dealt with a great number of subjects, his own philosophy of Terralism acting as the vital connecting thread. The lecturer came early into conflict with the religious

leaders of the small market town whose society was dominated by the worshippers and clergy of the abbey church and the non-conformist chapels. But such opposition had few terrors for J.H. even when the criticism of the content of his lectures, which challenged the belief in personal immortality, urged a better use of Sunday, expressed a complete allegiance to the doctrine of evolution, and declared that man's greatest responsibility was to meet the needs of his fellow man here on earth, turned to personal abuse. His last visit to Selby was in 1906 and the influence of his museum there did not survive his death.

On August 24, 1869, J.H., in spite of the extent of his professional commitments accepted the post of editor of the *British Medical Journal*, which had become vacant by the resignation of Ernest Hart under somewhat mysterious circumstances. There is no doubt that J.H. found the work of this important post most congenial and one which, with his previous experience, he found little difficulty in filling. He had first-hand knowledge of the work of all the London and many provincial hospitals, he had personal experience of surgical and clinical work in four London hospitals, he was an acknowledged specialist in at least one branch of medicine, and was gifted beyond most of his colleagues in the range of his knowledge and his skill as a clinical teacher. In addition, he had first-hand experience of Continental medicine.

The editorials he wrote during his one year as editor, make fascinating reading, for they display his remarkable versatility. They show too, that he possessed original views on many controversial topics and, as might be expected, they show that he was not averse from stating them whenever the opportunity occurred. Perhaps in this lay his reason for accepting the post. He entertained most revolutionary ideas for reforming the profession of medicine and as he believed wholeheartedly in his personal opinions and in his persuasive powers, the chance to air his reforming views and so goad the members to examine the state of the profession would seem too good to miss. It is impossible even to summarize the contents of these editorials but one important topic which did flare up during the year must be mentioned. This was the controversy surrounding Lister's antiseptic method of treating wounds, and as J.H. dealt with the events and discussions in his editorials this seems an excellent place to discuss his own attitude to the question of antiseptic surgery. The whole question of the treatment of open wounds, however caused, had been frequently discussed by the medical profession and the tone of the expressions of opinion had been very acrimonious. It was Nunneley's Address in Surgery at the B.M.A. meeting in August 1869, which brought matters to a head, for the speaker, who was opposed

to Lister's methods, attacked both Lister and his method bitterly, and criticised Lister's published results very severely. J.H., in the next issues of the *British Medical Journal*, published three articles under the title "The Origin of Life", outlining Pasteur's work and the theories based on it. He followed this with an editorial on "The Carbolic Treatment of Wounds", in which he urged that personalities should be avoided and that all should do "everything in their power to master the principles involved in the treatment and be in no hurry to take sides. One can only await the results of accumulated experience". In a later editorial, he gave an excellent summary of Lister's antiseptic treatment and urged that all possibilities should be kept in mind. At this point, J.H. resigned the editorship of the *British Medical Journal*, Edward Hart being re-instated, but J.H. continued to make known his views on Pasteur's theories and Lister's methods based on those theories in addresses and discussions in medical societies. It is important to remember, in discussing J.H.'s attitude to Lister's work, that although Lister was one of his friends and much of their earlier careers ran parallel, J.H. was neither a chemist nor a practical biologist. In the 1840s as a medical student in a small remote medical school, he had been reared on the antiphlogistic theory of the treatment of disease. With this foundation, driven by a sense of dedication to suffering humanity and influenced by Paget, he had developed into a clinician of outstanding ability whose whole outlook was to keep the patient in the very centre of the picture. This outlook meant that, although he finally came to accept the existence of "germs" and their role in causing suppuration in open wounds, yet he was always reluctant to use that knowledge; indeed he often gave the impression of dismissing any possibility of their being present when he was discussing the diseased condition of a human being standing before him. This reluctance was, perhaps, due to the fact that he could never quite separate the "products of inflammation" from "germs" as, for example, when he taught that inflammation of the veins was a contagious condition and caused the pyaemia and septicaemia of hospital wards. His attitude to theories which involved the notion of specific germs as the cause of diseased conditions was that of a clinician, grounded in the experience of examining human beings showing the symptoms of a diseased condition, and using the trained senses and a mind well stocked with knowledge accumulated by applying those senses to similar cases and noting and comparing with infinite patience in order to reach the truth, and eventually the cure. His clinical training made him see the human being first, and the diseased condition second; indeed it was this empha-

sis on the human being which led him to the habit of labelling a new diseased condition with the name of the patient whom he first saw with it, like "Mrs. T....'s legs" and "Mr. J....'s nose". But one must not imagine that J.H. was wholly without the capacity to learn. Very early in the period when the great controversy over Listerism was raging, he himself was applying lead lotion and spirit to open wounds, however caused, and thus he enjoyed the better results which followed the use of this "antiseptic" method, although he gave as his reason for using lotion and spirit dressings on the wounds that in so doing he was "repressing inflammatory action." He was certainly no blind antagonist of the "carbolic acid" school, but he always stressed that total reliance on such "scientific" treatment could bring in its train the great danger that the patient himself would be forgotten, a state of affairs which was quite foreign to his whole conception of medicine and against every principle upon which he stood as an acknowledged leader in his profession. This clinical approach to all branches of medicine and surgery for which he is eminently remembered, was evident in everything he accomplished. In developing his theory of the cause of leprosy, he almost ignored Hansen's discovery of the bacillus; his eminence as one of the greatest of the dermatologists is also based entirely on his clinical skill; his greatness as a syphilologist rests upon his clinical work, and the same underlying motif is to be found in all he accomplished outside his medical work, especially in his high standing as exponent of the use of the museum as a great tool in objective education. Unfortunately, when Lister was fighting the last battle to get his methods accepted in the London hospitals, J.H.'s alternative theory of the contagious nature of "inflammation" and of the need to use devices to suppress this condition in the patient's body, coupled with J.H.'s undoubted eminence in London medical circles, certainly contributed much to the length of time which elapsed before Lister's method with the underlying theory of germ activity was accepted in 1874. In addition, because of his skill in debate and his characteristic stubbornness of mind when convinced of the soundness of arguments, J.H.'s beliefs certainly added to the acrimony of the debates which went on for some years. Besides taking a leading part in this controversy, J.H. was also most intimately concerned with all the other great controversial questions which exercised the minds of the medical profession through the 1870s and 1880s. As president of a number of medical and surgical societies during that period and as the Orator in Surgery of the British Medical Association in 1881, he made his views known—indeed, even without holding any official office, if he thought

his contribution could bring light and harmony to those in heated dispute, J.H. did not hesitate to speak. In 1875, when President of the Metropolitan Committee's Branch of the B.M.A., he was in the forefront of those opposing the work of the anti-vivisectionists who wanted to ban all scientific experiments on living animals. Until 1881, there was immense activity on this question, with J.H. expressing the view that such experiments were essential for the advancement of science and preaching a policy of limitation and control. This same period saw the publication in *The Times* of letters about the admission of women as members of the medical profession, following Miss Jex Blake's treatment by Edinburgh University. As one may imagine, J.H. had decided views about women as members of the medical profession and he made those views known publicly in a presidential address in 1867. He opposed their entry on the grounds that the mental powers of the female brain differ from those of the male, the difference in reference to those qualities necessary for the pursuit of medicine being in favour of men. He was of the opinion that there is much in medical education and practice which should be repugnant to women and best unknown to them; indeed, he remarked that women should be content to be home makers and the bearers and educators of children, and be content with that high calling. Here, of course, speaks the Victorian male, but he did make his criticism constructive in that he appealed to those in authority to make the posts of professional men more remunerative so that fewer single women would need to enter professional careers.

The vexed question of the status of those who practised homoeopathic medicine raised its head in 1881 and both J.H., as the Orator in Surgery, and Bristowe, the Orator in Medicine, at the B.M.A. Annual Conference, referred to it. J.H., with reasonable tolerance, expressed the view that it would be best to let things work themselves out; to be reasonable and to work with homoeopathic practitioners if their qualifications were those universally recognized, and then leave the choice of the treatment recommended to the patient and to his medical advisor. This brought a storm of protest from the orthodox practitioners, which J.H. did not answer.

Two other important topics upon which he expressed his opinions in addresses and in the medical journals were, the choice of anaesthetics, and the reform of medical education. In the first topic, he came decisively down on the side of ether, but with the added provision that chloroform, in his practical experience, was better for those under 6 and over 60 years of age. He added too, that he always accompanied the giving of ether and chloroform to older

people with a glass of brandy. The articles in which he sets out his opinions are full of his concern for the patient and illustrate the care and consideration which always attended his surgical activities. His attitude to medical education was revolutionary when viewed against the system in operation at the time. He would have medical students face annual written examinations, rather than one *viva voce* examination at the end of the course. He thought that the medical museum with its attendant lectures and clinical demonstrations should be at the centre of medical teaching and that there should be a uniform system of examination for the whole profession. He even suggested, in the interests of fair play, that every student should be asked the same questions in his final *viva voce* and at one stage, put the suggestion into practice—with disastrous results! He wanted the Royal College of Surgeons to take on the responsibility of completing the medical and surgical education of those already qualified and of developing their knowledge to the highest degree possible. In all this, he was, of course, a reformer before his time, but one who had always the dignity and honour of the profession nearest his heart.

In all these controversial questions, J.H.'s ideas were widely discussed by the members of the whole profession. His views stimulated their minds, gave them thrilling new avenues of thought down which to move and often enough stirred their consciences. He believed that he was sent for the purpose of stimulating them to the highest forms of service for their suffering patients and he never shirked that self-appointed task.

In 1875, he published the first volume of his "Illustrations of Clinical Surgery", a large folio consisting of plates, photographs, and diagrams illustrating diseases, symptoms, and injuries with a fully descriptive letterpress, abstracted from his immense private collection. He expressed the hope that he would be able to publish a similar portfolio every quarter, but after publishing four more folios in 1878, 1879, 1883, and 1884, he replaced them by another publication. The reviews of his "Illustrations" were unanimously flattering and there can be no doubt that, in making the material available, J.H. was but following the road on which he had set himself to travel when first he dedicated his talents and industry to following the truth as he saw it and making that truth available to others. The welcome which these extracts from his collection received caused him to change his plans. Instead of continuing indefinitely with these folios, he began to publish an annual volume containing, in addition to a great number of illustrations from his collected material, the addresses he had given during the year, his views on many controversial topics and

a great number of clinical reports. He called those volumes *Archives of Surgery*. They appeared between 1890 and 1900 and were written entirely by himself. They form a rich source of addresses, case illustrations, and descriptions of a bewildering variety of diseased conditions, interspersed with articles on all his foreign visits and reports on his visits to conferences, together with his news on the nature and treatment of syphilis, skin diseases, cancer, rheumatism, diseases of the eye, and many other pathological conditions. They contain also catechisms of surgery, with outlines of cases for diagnosis, full descriptions of rare diseased conditions and abnormalities and expressions of his own opinions on a large number of topics in every branch of medicine and surgery, including medical education and the reform of the medical profession. Nothing like these volumes had ever before been published and their contents so fascinated Garrison, the medical historian, that he expressed the opinion that one day, their contents would be studied with great profit like the works of John Hunter.

When, at his instigation, the Medical Graduates College and Polyclinic was formed in 1900 in Chenies Street, to extend the work done in his private clinical museum, J.H. stopped publishing his *Archives* and assumed the editorship, and indeed almost the whole of the writing of the College's journal, *The Polyclinic*. In a real sense, this journal replaced the *Archives* and became the vehicle for expressing his own views on all medical and surgical questions, and on the demonstrations and lectures given in the College. This appropriation of almost all the space in the journal for the dissemination of frequently controversial and peculiarly personal opinions soon began to irritate his fellow members and was the cause of an ever widening rift between J.H. and the members of the College Committee. In the end, he resigned all connexion with the College in 1911. It is significant that it did not long survive his departure. When the College was finally wound up in 1913, William Osler bought the magnificent collection of illustrations, almost all of which had been presented by J.H., and shipped it over to the Johns Hopkins Medical School in Baltimore in twelve large crates. There it forms the nucleus of one of the world's finest collections of illustrations of clinical surgery.

Amongst J.H.'s other medical publications not already mentioned were his "Aids to Ophthalmic Medicine and Surgery"; "A Smaller Atlas of Illustrations of Clinical Surgery"; "Framboesial Syphilis" and "The Pedigree of Disease." He also wrote the introduction to "A System of Syphilis" by D'Arcy Power and J. K. Murphy, and, with Sir Frederick

Treves, who was one of his most famous students, "A Manual of Operative Surgery."

Apart from these medical publications, and in order to advertise and explain the basis upon which his museums were organized, he wrote "The Centuries" which illustrated the chronological synopsis of history on his "space for time" method, and during the years of his retirement from active medical work, when he was devoting all his attention to developing his museum ideas, he wrote the first volumes of a "Home Educator" which was to be issued in monthly parts and sold on a subscription basis from his educational museum. When one remembers that most of these were published whilst he was actively engaged in writing and delivering addresses to learned societies of all kinds, and also sending notes and views on clinical cases for publication in a great number of medical journals, his industry, even for a Victorian, seems prodigious. His philosophy of Terralism might seem to us to be merely a kind of optimistic humanism but it gave its author a driving force to his activities which never ceased throughout his long life and enabled him to give prodigiously of his great talents to uplifting the aspirations and bettering the lot of his fellow men.

When J.H.'s father died in 1872, his whole mode of life underwent a great change. There had always been the strongest ties of affection between the old Quaker in Selby and his second son, and Quay House had always been a holiday centre for J.H. and his family. As previously mentioned, J.H. at this time was feeling the strain of carrying the burden of four active hospital appointments, of lecturing, of running an expanding consulting practice, of acting as secretary of the New Sydenham Society, and of attending to the affairs of many other associations. These constituted a programme of work which took every ounce of his strength to fulfil. By now, his family had grown to eight children and they and their mother spent long periods in summer in Haslemere. Thus he found that all his appointments were necessary to keep himself solvent; although his own inclinations were turning more and more away from surgical practice and more and more towards consultation work, clinical teaching, lecturing, and attendance at medical societies.

The money which he received from his father's estate was substantial and eased a great burden from his shoulders. The first thing he did was to purchase a large country house and estate in Haslemere called Inval, and this became the family country home for many years.

It was here that J.H. now began to enjoy again the country pursuits of his boyhood. The big house, Inval, became the centre of a vigorous family life and

a home for visiting medical specialists both British and foreign with Jane Hutchinson acting as the gracious hostess. J.H. kept on his London house at 4 Finsbury Circus and went to Haslemere with Tay, Nettleship, and Jackson at weekends. Soon, he perceived the great possibilities of the Haslemere district and very soon he set to work to enlarge and develop his estate. He bought more and more land as the occasion occurred and personally superintended the clearing of the scrub, the building of roads, the digging of wells for water, and the building of houses, in the planning of which he was helped by his architect son, Herbert. The beauty and quietness of the Haslemere countryside lent themselves to this development and to the building of large country houses for wealthy professional men, and soon John Morley, John Tyndall, and Lord Tennyson were J.H.'s neighbours and friends. It was on this estate that J.H. developed his first museum and later in Haslemere that he established his famous Educational Museum. Five years after his father's death, he sold 4 Finsbury Circus and bought 15 Cavendish Square, and this hereafter became the centre of his large consulting practice. From 1877, then, the two centres of his active life became his house in Cavendish Square and Inval in Haslemere.

As a direct result of these changed circumstances, J.H. made plans to resign from his hospital appointments. He resigned his post as surgeon at the Metropolitan Free Hospital in 1873 and at the same time sent in his resignation to the London Hospital where he was now senior surgeon, and had built up a flourishing school of clinical medicine, at the sessions of which great crowds gathered to hear him teach and to witness his demonstrations. On being pressed by the Hospital Committee to reconsider his resignation, however, he withdrew it and continued to fill the post of senior surgeon for a further 10 years. There can be no doubt that, as a clinician and clinical teacher in many fields of medicine and surgery, J.H. at this period of life had few equals in either the London or the provincial teaching hospitals. One who met him later and heard him lecture has left this picture of him:

"What we saw that day was a tall man with a great dome of a head, dark eyes looking benevolently through steel-rimmed spectacles, and a white beard which came well down on his chest. He was dressed in a suit of black broad cloth and looked like an absent-minded professor, though there was nothing in the least absent-minded about his delivery. I do not remember what he talked about that day but he held us completely for an hour. He spoke rather slowly and solemnly, and what he said was clear and logical. There was nothing scintillating about it, but you felt

he was speaking out of an immense knowledge. Occasionally he illustrated his point by some unexpected simile and there was a distinct north country intonation in his voice which seemed somehow to make what he said more trustworthy!"

In 1878, he resigned from his position as senior surgeon at Moorfields on being elected to the professorship at the Royal College of Surgeons. Besides being associated with Moorfields as a surgeon for nearly 20 years, J.H., had for many of those years, edited the *Ophthalmic Hospital Reports*, sometimes alone and sometimes with Tay or Nettleship; the *British Medical Journal's* reviews of these reports were always full of the highest praise for their usefulness.

From 1873, when he resigned all his hospital appointments but that at the London, until 1883, when he retired from the London too, a picture of his life may be drawn from the sketches of his activities already outlined above.

During those 10 years, he established his town house and consultation centre at 15 Cavendish Square and his country residence at Inval in Haslemere. At each, he entertained many distinguished guests both British and foreign, and gave parties and dinners for the members of the societies of which he became president. His established clinical sessions at the London became famous and there he demonstrated his extraordinary skill as a clinical teacher to enthusiastic crowds. In the wider medical world, he entered fully into every kind of controversial question which was being ventilated and his contributions were always listened to with the respect due to one who never spoke lightly or without the closest attention to the effect his words might have not only on his immediate audience but on future medical opinion. Amongst the topics he pronounced upon were the antiseptic treatment of open wounds, homoeopathy and general medicine, anaesthetics, vivisection, medical education, and the admission of women to the medical profession. In addition, he visited Paris again to renew his acquaintance with the contents of the great museums with their unique collections of dermatological specimens and at the same time to gain first-hand experience of the work of Charcot and his clinical methods. On his election as Professor at the Royal College of Surgeons, he delivered six lectures on "The Pedigree of Disease", later collected and published as a monograph, and he also examined for the College. In 1881, he helped to organize the great International Medical Congress held in London and accepted full responsibility for the organization of the museum attached to it. He still continued his work as secretary of the New Sydenham Society and was personally supervising not only the running of

the society's activities but also the publication of a steady stream of translations of foreign treatises in medicine and surgery. All this activity, with the publication of material from his own private collection he undertook in addition to running his private consulting practice. In the many letters written to his wife at this period, he explains over and over again the value of his philosophy of life, of the truth of which he was now firmly convinced. He once wrote as a summary of his belief, "We are children of the Eternal past and the parents of the eternal 'to-be' and our separate personality is, so it seems to me, a thing of very short and uncertain duration."

The crown of this period, as it seemed to J.H. himself and is expressed in one of his letters, was his election to the Fellowship of the Royal Society in 1882. When this honour was bestowed on him, he felt that he had attained the goal of one of his greatest ambitions as well as having the value of his life's work openly acclaimed. His non-medical activities consisted of superintending the development of his Haslemere estate.

With the resignation of his post as Senior Surgeon at the London Hospital in 1883, J.H. ceased to take any further active practical part in the medical life of London, although he continued as a consultant in Cavendish Square until the end of his life. From then on, all that astonishing skill which he had displayed as a clinician in a teaching hospital was to be redirected to the organization and development of teaching museums, first the medical ones at Park Crescent, leading finally to the Polyclinic in Chenies Street, and secondly the general educational ones in Haslemere and Selby. In all these instances, he demonstrated once and for all the vital role which a properly organized museum could play in education, especially if it had the right personality and the correct aims at the centre of its activities. His *Archives of Surgery* were really an expression of the same idea for, as they were constituted, they were like printed museums, in which subjects were picked up and put down at will, as new information about them was received, but always with the aim of keeping those in the thick of the battle against disease completely up-to-date.

But perhaps, above all, the years after 1883 were those in which J.H. in every sphere of activity, reaped the rich harvest of reward for his life of dedication. He was the recipient of many honorary degrees, from the Universities of Cambridge, Edinburgh, Glasgow, Dublin, Leeds, and Oxford, and the holder of many honorary fellowships of foreign societies. After filling the presidential chairs of the many societies already mentioned, culminating in the presidency of the Royal College of Surgeons, he received the honour

of Knighthood in 1908 in recognition of his great service to medicine.

One reward eluded him, however. His profession never accepted his cherished theory that the eating of badly-cured fish was the cause of leprosy, even though when nearly 80 years of age, he made long and exhausting trips to South Africa and India to see for himself the conditions in leper colonies. He returned from these trips more convinced than ever that leprosy could only be stamped out if badly-cured fish were prohibited as an article of diet where the disease was prevalent. His book "On Leprosy and Fish-eating", published in 1906 was his last and most persuasive effort. Right up to his death, he was never for a moment less than completely sure that he was right, and that eventually his theory would be completely vindicated. That he might not be present on that great occasion did not bother him in the slightest; his life's work would go into the stock of knowledge and mankind would benefit.

Jane Hutchinson's death in 1887 at the age of 53 years was a most grievous loss, and her passing dictated the pattern of his last years. Some of his older children were married and two of them had qualified in medicine, but the younger were too immature to be left without supervision. Two of his daughters went to boarding school at Lausanne and the big house Inval became the home, not only of the rest of his children but also of his two sisters and his brother's widow with her two children. He remained at 15 Cavendish Square, except for week-end visits to Haslemere to organize his educational museums and lecture. Finally, he moved to a smaller house in Gower Street to be near the Polyclinic in Chenies Street and then, when he parted company with the committee of the Polyclinic, he retired to Haslemere and built himself a small, comfortable home on the hillside above Inval called "The Library". Here, surrounded by his books and with Hughlings Jackson as a companion till the latter's death in 1911, he spent the last years of his life, well looked after by his two daughters, the revered patriarch of the large Hutchinson clan, and here it was that he died of old age on June 23, 1913.

In passing in short review J.H.'s many-sided activities, after a short space of 50 years after his death, one thing stands out. Except for his contributions on hereditary syphilis and dermatology, very little else of what he taught and believed in so fervently has stood the test of time. He is, of course, overshadowed by his great friend Lister, whom he admired greatly and of whom he once said "If there is any man whom I could envy it is Lister". What then is J.H.'s claim to a permanent place in medical history? It seems to the writer of this short biography that his place is assured

because of the stimulating effect of his mental activity on the climate of medical opinion in his generation. He acted like a catalyst on medical thought and activity, and also on the wider activity of educational circles in general. He was indeed a born teacher in the very finest sense of the term, goading men of all classes and intellectual standing to think, and to this end he opened up for them new avenues down which their imaginations could progress. This became his role in life because he was steeped in the Quaker traditions of steadfast industry and thoroughness, and of benevolence and charity to all men, and this developed into accepting a philosophy of life which became a driving force of almost religious intensity, urging him to give of his great natural gifts and talents to the alleviation of suffering, to the true education of all men to accept the greatness and responsibilities attaching to their manhood, and to the accumulation of true knowledge wherever it was to be found. He resembled a catalyst in another characteristic; he often remained unchanged in his beliefs throughout any discussion and debate, although he was always most actively engaged in the process.

Two serious criticisms have been levelled at J.H., one of them during his lifetime. Early in his career, he was accused of pluralism, holding as he did surgical appointments at four hospitals at the same time, and thus perhaps depriving others of their first chance in surgical practice. One can only say in defence that he used the opportunities he met with in his hospital work to the fullest extent and that the results he obtained and the men he inspired, both junior staff and students, justified the means. After his death it was said that he was not above using other surgeon's work as his own and for his own particular ends. This was particularly said of his relationship with Tay, Nettleship, and Hughlings Jackson at Moorfields. At first sight, there seems to be some truth in this criticism, but not one of these men ever complained of his treatment of either themselves or their work: indeed they openly acknowledged his superior wisdom and skill, and worked and lived with him more in

the spirit of disciples than of equals. They formed a team with J.H. as the acknowledged head, and to them, all the results of their work were held in common. If J.H. could use the results to advantage, and make them known for the benefit of mankind, then that to them was their sufficient reward.

J.H. chose his own epitaph and this may end this short biography:

"A man of hope and forward-looking mind."

BIBLIOGRAPHY

- Bruce, G. M. (1937). *Bull. N. Y. Acad. Med.*, **13**, 539.
 Chance, B. (1935). *Arch. Ophthalm. (Chicago)*, **14**, 203.
 Fox, R. H. (1913). *Lancet*, **2**, 43 (Obituary).
 Godlee, R. J. (1925). *Brit. J. Ophthalm.*, **9**, 257.
 — (1927). In "Dictionary of National Biography, 1912-21", ed. H. W. C. Davis and J. R. H. Weaver. Oxford University Press.
 Hutchinson, H. (1946). "Jonathan Hutchinson. Life and Letters." Heinemann, London.
 Ingram, J. T. (1947). Leeds and West Riding med.-chir. Soc. Presidential Address.
 — (1958). *Proc. roy. Soc. Med.*, **51**, 321 (Presidential Address, delivered October 17, 1957).
 Jackson, J. Hughlings (1925). "Neurological Fragments", ed. J. Taylor. Milford, London.
 Kelly, E. C. (1940). *Med. Classics*, **5**, 108.
 Klauder, J. V. (1934). *Med. Life*, **41**, 313.
 Nettleship, E. (1913). *Ophthalm. Rev.*, **32**, 225 (Obituary).
 Osler, W. (1915). *Bull. Johns Hopk. Hosp.*, **26**, 82.
 Swanton, E. W. (1947). "A Country Museum: The Rise and Progress of Sir J. Hutchinson's Educational Museum at Haslemere", Educational Museum, Haslemere.
 Wales, A. E. (1949). "Life and Work of Sir Jonathan Hutchinson, 1828-1913", 3 vols. Brotherton Library, University of Leeds.
 Wetherill, J. H. (1961). *Med. History*, **5**, 253.
 Obituary Notices (Unsigned):
 (1913). *Brit. J. Derm.*, **25**, 225.
 (1913). *Brit. med. J.*, **1**, 1398.
 (1913). *J. Amer. med. Ass.*, **61**, 131.
 (1913). *Lancet*, **1**, 1832.
 (1915). *Int. Ass., med. Mus. Bull.*, No. 5, p. 14.
 (1920). *Proc. roy. Soc. B*, **91**, 41.